

## 1. Congressional Mandate

Title III - Communications and Spectrum Allocation Provisions of the Balanced Budget Act of 1997 (BBA of 97) required NTIA to reallocate 20 megahertz (MHz) of spectrum below 3 gigahertz (GHz) for assignment by the Federal Communications Commission (FCC). The spectrum will be used in a competitive bidding auction process and is estimated to raise 26 to 36 billion dollars. NTIA selected the spectrum by balancing the impact on the Federal Government versus the benefits to be gained by the public. NTIA's spectrum reallocation report (Appendix 1 and available as an Adobe Acrobat version on the NTIA Web site URL: <http://www.ntia.doc.gov/osmhome/reports/bba97.html>) was sent to the President, Congress and FCC on February 6, 1998.

## 2. Impact Analysis

The field offices provided initial impact information based upon original frequency bands that have been modified as Federal Government mission and cost assessments were formulated. For example, the band 225 - 235 MHz, initially targeted by NTIA, was dropped based upon impact data obtained including \$200 million impact on the DOE Proliferation Detection and Environmental Monitoring Program. The frequency bands selected, dates of allocations change and any associated conditions of continued use are presented in Table 1.

**Table 1.**  
**Spectrum Reallocation Plan**

<b>Bands Identified for Reallocation</b>	<b>Reallocation Status</b>	<b>Reallocation Schedules</b>
<b>139-140.5 MHz 141.5-143 MHz</b>	<b>Mixed</b>	<b>January 2008</b>
<b>216-220 MHz</b>	<b>Mixed</b>	<b>January 2002</b>
<b>1385-1390 MHz</b>	<b>Exclusive</b>	<b>January 1999</b>
<b>1432-1435 MHz</b>	<b>Mixed</b>	<b>January 1999</b>
<b>2385-2390 MHz</b>	<b>Exclusive</b>	<b>January 2005</b>
<b>Notes:</b>  <b>1) Spectrum reallocated on a mixed-use basis can be used by the Federal Government, but this use must be limited by geographic area, time, or by other means, and must be substantially less than the potential non-Federal use.</b>  <b>2) The spectrum will be auctioned prior to 2002, in accordance with the Balanced Budget Act of 1997.</b>		

All, except for one Albuquerque use, are in the mixed use bands which will be allowed to continue under existing frequency authorizations but no system expansions will be

allowed and any interference will be resolved through joint FCC/NTIA coordination procedures. Further, Title III permits a private sector entity to submit a petition to NTIA to relocate a DOE-assigned station that is in the bands outlined within Table 1 above. The one Albuquerque radio use that is in an exclusive band (must cease operations) is for a Sandia National Laboratory system that, according to the frequency manager, can be adjusted to be in conformance by not overlapping into the band.

Based on preliminary data received from the field entities, it appears that the maximum impact on the wireless telecommunications, authorized by NTIA will not exceed \$2.1 million. A summary listing affected entities are presented in Table 2.

**Table 2**  
**Listing of DOE Field Offices Possibly Affected by BBA of 97**

<b>Appendix</b>	<b>Band</b>	<b>Entity</b>
2	139- 143 MHz	Albuquerque Operations Office Nevada Operations Office
3	216-220 MHz	Albuquerque Operations Office Chicago Operations Office Nevada Operations Office Oakland Operations Office Oak Ridge Operations Office Richland Operations Office Savannah River Operations Office
None	1385-1390 MHz	None
4	1432-1435 MHz	Oakland Operations Office Savannah River Operations Office
5	2385-2390 MHz	Albuquerque Operations Office

A complete listing of NTIA frequency authorizations for each frequency band in Field Office order is contained in appendices 2 through 5.

### **3. Remedial Actions**

#### General Policy

It is the intent of Congress that NTIA should promote Federal Government maximum reliance on commercially available wireless substitutes; use non-radiating telecommunications systems where possible and share when possible (see NTIA Spectrum Reallocation Report, Appendix A , page A-12). Most of DOE's assigned frequencies have already previously met this policy criteria prior to obtaining NTIA authorization, and if any relocation is needed, then only an update to consider means other than NTIA frequency authorizations is required. It is proposed to use the DOE Wireless Telecommunications Working Group as a means to discuss and consider which options

are the most feasible to reaccommodate services and share any reaccommodation experiences. A process has been established to allow DOE to accept payment for relocating Federal Government Stations and NTIA terminating the licence (see Appendix 1, page A-15).

### Discussion

The cost estimate for DOE to move out of NTIA's initial candidate bands exceeded \$208 million, however adjustments made by NTIA, based upon input from all agencies, significantly reduced the cost to DOE. The upper limit on cost to reaccommodate NTIA authorized wireless services in bands selected for transfer is now estimated to be \$2.1 million. However, the cost is expected to even be less since:

- all except one of DOE's authorizations are in mixed bands,
- one of the systems, a Savannah River quarter million dollar system has been identified as being protected indefinitely (see page 3-34 of Appendix 1),
- many of our operations are in low density areas,
- the field offices may except payment for relocation, and
- the reallocation schedule ranges from 1 to 10 years and commercial systems may not be deployed for several years after auction.

While it is possible that there will be additional impacts upon the Department since FCC has not completed its action, it is highly probable that the 20 MHz identified by NTIA will not be changed. However, it is also possible that BBA of 97 may result in additional impact if the Federal Government has to accommodate FCC displaced licensees or assist FCC in identifying additional spectrum for auction.

### Proposed Action

The impact upon the Department is currently manageable unless FCC takes new action resulting in additional impact. Therefore, it is proposed that the field offices independently develop their own spectrum plans by assessing the life cycle specific systems and tolerance to future interference. Further, it is proposed to use the Wireless Telecommunications Working Group, identified in DOE Corporate Guidance and Strategy, Number 29, as the forum to identify any common areas requiring the development of collaborative actions or urgent attention.

## **4. Comments**

Questions or suggestions on the proposed action are requested 45 days after date of this plan. Questions should be directed to Bill Hollingsworth on FTS 301-903-2997.